
Appendix I

MANAGEMENT AND SETTING PRESCRIPTIONS FOR CAVE RESOURCES AND ABANDONED MINES

Management and Setting Prescriptions

Cave Resource and Abandoned Mines Management Objectives

All caves defined as significant (see below) under the Federal Cave Resource Protection Act (FCRPA) of 1988 [16 United States Code (USC) 4301 - 4309] within the Planning Area will be managed in order to allow for appropriate access while, at the same time, preserving the biotic, mineralogical, paleontological, hydrologic, and cultural values; and in order to address public health and safety and rescue issues. [The FCRPA defines the term "cave" as "any naturally occurring void, cavity, recess, or system of interconnected passages which occurs beneath the surface of the earth or within a cliff or ledge (including any cave resource therein, but not including any vug, mine, tunnel, aqueduct, or other manmade excavation) and which is large enough to permit an individual to enter, whether or not the entrance is naturally formed or manmade. Such term shall include any natural pit, sinkhole, or other feature which is an extension of the entrance" 16 USC 4301-4309(1).] Entry into abandoned mines within the Planning Area would be discouraged or restricted in order to protect bat populations while, at the same time, providing for public health and safety.

In accordance with the FCRPA, a "significant" cave on Federal lands shall possess 1 or more of the following features, characteristics, or values:

- **Biota** -- The cave provides seasonal or year-long habitat for organisms or animals, or contains species or subspecies of flora or fauna that are native to caves, or are sensitive to disturbance, or are found on State or Federal Sensitive, Threatened, or Endangered Species lists.
- **Cultural** -- The cave contains historic properties or archaeological resources (as described in 36 CFR 60.4 and 43 CFR 7.3) or other features that are included in, or eligible for, inclusion in the National Register of Historic Places (NRHP) due to their research importance for history or prehistory, historical associations, or other historical or traditional significance.
- **Geologic/Mineralogic/Paleontologic** -- The cave possesses 1 or more of the following features:
 - geologic or mineralogic features that are fragile, or that exhibit interesting formation processes, or that are otherwise useful for study;
 - deposits of sediments or features useful for evaluating past events; and/or

- paleontologic resources with potential to contribute useful educational and scientific information.
- **Hydrologic** -- The cave is a part of a hydrologic system, or contains water that is important to humans, biota, or development of cave resources.
- **Recreational** -- The cave provides or could provide recreational opportunities or scenic values.
- **Educational or Scientific** -- The cave offers opportunities for educational or scientific use; or the cave is virtually in a pristine state, lacking evidence of contemporary human disturbance or impact; or, the length, volume, total depth, pit depth, height, or similar measurements are notable [Section 37.11(c)].

Setting Prescriptions

Physical

All significant caves will be managed in a manner designed to maintain the current level of remoteness (backcountry in nature) from motorized and mechanized vehicles in order to preserve cave resources and the natural appearance of the cave. No new facilities, roads, or trails will be built in order to access the caves. Only minor modifications (tape, signage, rescue caches) for scientific purposes, and to accommodate safe use, will be allowed. Evidence of use and other people will remain low. Restrictions would be applied to activities that could damage cave resources or disturb bats and other cave biota. Abandoned mines may be signed or have barriers erected in order to prevent entry. No new facilities, roads, or trails would be built in order to access abandoned mines.

Social

Such factors as visitor use limits, group size, and season of use will be managed through monitoring, and through subsequent implementation decisions described in Cave Management Plans for each significant cave, group of caves, or complex of caves. The Colorado Cave Survey (CCS) may be consulted for recommendations and coordination efforts in order for BLM field personnel to properly manage and provide outreach that meet BLM laws, rules, regulations, policies, standards, and guidelines. Accessible abandoned mines may have explanatory and interpretive information provided, along with appropriate measures designed to ensure that there is no entry unless otherwise authorized by the BLM.

Targeted Activities and Outcomes

All management actions will be focused on specific activity outcomes for caving and research, and the interpretation of abandoned mines, where appropriate. Experience Outcomes will be for participants to enjoy and learn more about cave and karst resources, and about the history of abandoned mines. Specific Benefit Outcomes will be for environmental benefits, such as increased environmental stewardship; and the preservation/protection of unique biotic, paleontological, and mineralogical aspects of caves. The interpretation information provided in relation to abandoned mines, while preventing entry, will provide personal Experience Benefits such as learning more about abandoned mines, and increased appreciation of the area's

history. Social Benefits will be to provide environmental learning and appreciation of cave and karst systems.

Operational

All significant caves will be managed under the FCRPA, and Cave Management Plans will be developed. The BLM will continue to allow appropriate access while, at the same time, addressing issues and concerns relating to visitor safety and preservation of the cave values. The possible introduction of White Nose Syndrome (WNS) into caves or abandoned mines housing bat populations would be addressed by applying protective measures derived from applicable BLM laws, rules, regulations, policies, standards, and guidelines. If issues or concerns arise, necessary managerial controls (such as closures, permits, trip requirements, and/or gating) may be put in place, meeting all BLM regulatory requirements. The BLM will administer and authorize research, inventory, work projects, and digging trips, where it may be suitable, and where specific stipulations can ensure that cave resources are protected and preserved. Information and educational materials, developed through Cave Management Plans, may be provided to authorized visitors. Cave and karst resources, and abandoned mines, will not be marketed or promoted.